Welcome and Intro

Elizabeth Worcester (BNL)

Cold Electronics Mini Summer School

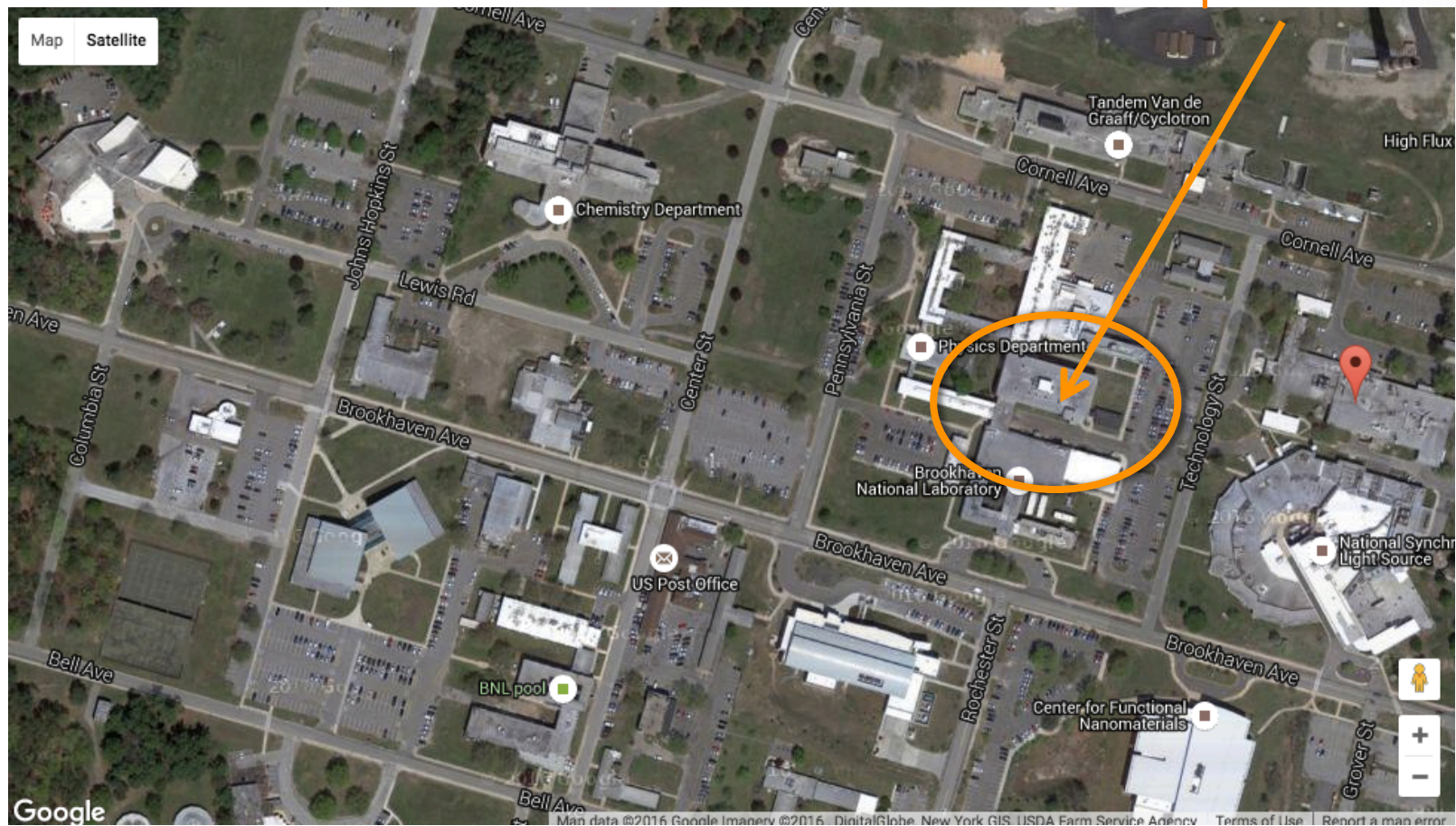July 18-21, 2016

WELCOME!

BNL Map

Instrumentation Division
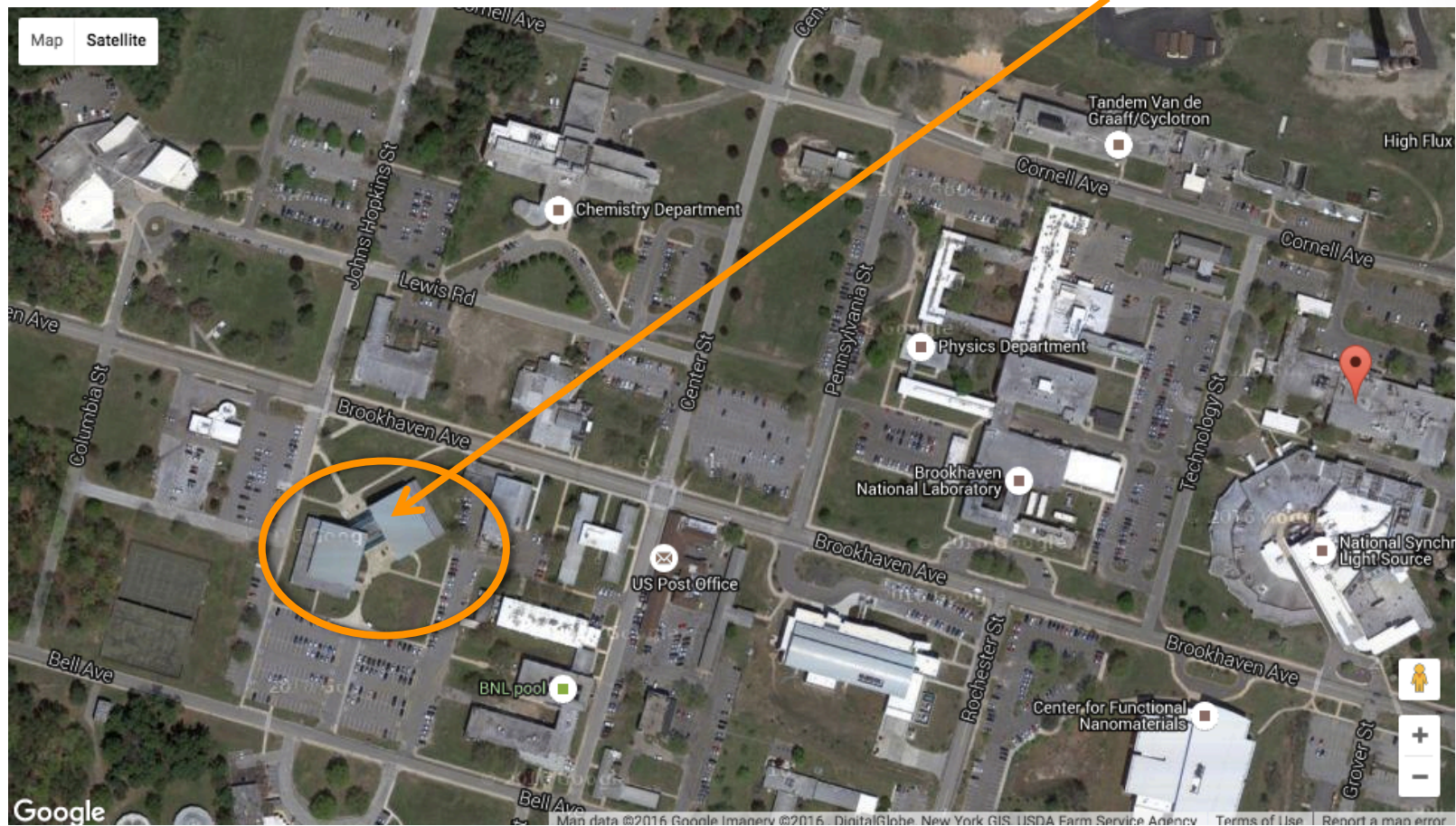

3

BNL Map

Physics Department

BNL Map

Berkner Hall
(Cafeteria)

BNL Map

Building 400
(Guest Services + Starbucks)

Agenda

- AM Lectures:
  - Monday: TPC Physics and Signal Formation
  - Tuesday: Filtering, Signal/Noise, ASIC Design
  - Wednesday: Correlation Functions, Sampling Limits, CMOS
  - Thursday: Motherboard Design and System Implementation
  - Coffee break @ 10:30 am
- PM Lab Sessions and Q&A
  - Monday: Intro to Lab Sessions (here)
  - Monday/Tuesday: Hands-on lab sessions and demos (Physics 1-216)
  - Tuesday: Parallel Q&A with experts (here)
  - Wednesday: Open (Excursion)
  - Thursday: Parallel Q&A with experts, Parallel lab session
  - Coffee break @ 3 pm (Monday, Tuesday), 2:30 pm (Thursday)
- www.bnl.gov/cemss/

Excursion to Montauk

- Wednesday afternoon, carpool will leave from BNL ~1:30 pm
- Meet for boat tour at 6:15 pm
- Sunset boat tour tickets have been purchased for:
    - Bill Badgett
    - Raquel Castillo
    - Shannon Glavin
    - Justin Hugon
    - Rachael Hugon
    - David Rivera
    - Mike Mooney
- Please reimburse me ($60)
- Additional tickets may be available – contact me if you would like to go

8

This is not a conference!

- Our goal is for everyone who will be working on cold electronics for SBND and DUNE to get to know the design principles, the hardware, the experts, and each other.

- We have scheduled plenty of time for discussion. Please do not hesitate to ask questions or raise topics for discussion.

- Thank you to the experts from the cold electronics design team and members of the BNL physics department for their time and effort preparing the lectures and lab sessions.

- SBND/DUNE CE development is completely joint. Some of us are members of both collaborations and some are not, but we will be working together as a group to make sure both experiments are successful.

- Please direct logistical questions to Elizabeth (etw@bnl.gov) or Matt (mworcester@bnl.gov)